

SF-83 SUPPORTING STATEMENT  
ENVIRONMENTAL PROTECTION AGENCY  
STANDARDS OF PERFORMANCE

National Emission Standards for Hazardous Air Pollutants (NESHAP) / Maximum Achievable Control Technology (MACT), 40 CFR Part 63 Subpart S, Pulp and Paper Source Category - Process Operations

**1. Identification of the Information Collection**

**1(a) Title of the Information Collection**

ICR for NESHAP - MACT Subpart S, Pulp and Paper Production Source Category - Process Operations

**1(b) Short Characterization/Abstract**

In general, all MACT standards require initial notifications, performance tests, and periodic reports. Owners or operators are also required to maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. These notifications, reports, and records are essential in determining compliance, and are required of all sources subject to MACT standards.

Any owner or operator subject to the provisions of this part shall maintain a file of these measurements, and retain the file for at least five years following the date of such measurements, maintenance reports, and records. All reports are sent to the delegated State or Local authority. In the event that there is no such delegated authority, the reports are sent directly to the EPA Regional Office.

The Maximum Achievable Control Technology (MACT) standards for the Pulp and Paper Production Source Category were proposed on December 17, 1993, and promulgated on April 15, 1998. These standards apply to facilities that produce pulp, paper, or paperboard by employing kraft, soda, sulfite, semi-chemical, or mechanical pulping processes using wood; or any process using secondary or non-wood fiber and that emits 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. Affected sources are all the hazardous air pollutant emission points or the HAP emission points in the pulping and bleaching system for mechanical pulping processes using wood and any process using secondary or non-wood fiber.

This information is being collected to assure compliance with 40 CFR Part 63 SUBPART S.

Approximately 162 sources are subject to the standard, and it is estimated that no new sources will become subject to the standard in the next three years. It is further assumed that there is one

affected facility per plant. These assumptions are based on the research conducted by EPA during the recent rule making. EPA is also aware that this industry is undergoing widespread consolidation and corporate restructuring, and that no new facilities are being built, though approximately 15% of the affected facilities will re-build units in a given year.

Respondents are required to monitor and keep records of specific operating parameters for each control device and to perform and document periodic inspections of the closed vent and wastewater conveyance systems. All respondents must submit semi-annual summary reports of monitored parameters. Respondents must submit an additional monitoring report during each quarter in which monitored parameters were outside the ranges established in the standard or during initial performance tests. A source identified to be out of compliance with the NESHAP will be required to submit quarterly reports until the Administrator is satisfied that the source has corrected its compliance problem.

The cost of this Information Collection Request for the 162 respondents subject to the standards is estimated at \$3,128,838.

## **2. Need for and Use of the Collection**

### **2(a) Need/Authority for the Collection**

The EPA is charged under Section 112 of the Clean Air Act, as Amended, to establish standards of performance for each category or subcategory of major sources and area sources of hazardous air pollutants. These standards are applicable to new or existing sources of hazardous air pollutants and shall require the maximum degree of emission reduction. In addition, Section 114(a) states that the Administrator may require any owner or operator subject to any requirement of this Act to:

“(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.”

In the Administrator's judgment, total hazardous air pollutants, which include: acetaldehyde, benzene, carbon disulfide, chloroform, formaldehyde, methanol, methyl ethyl ketone, toluene and xylenes emissions from Pulp and Paper Source Category - Process Operations cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, MACT

standards were promulgated for this source category at 40 CFR Part 63 Subpart S.

## **2(b) Practical Utility/Users of the Data**

The control of emissions of Total Hazardous Air Pollutants from Pulp and Paper Source Category - Process Operations requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of Total Hazardous Air Pollutants from Pulp and Paper Source Category - Process Operations result from the operation of the pulping, bleaching and wastewater handling units. These standards rely on the collection of total hazardous air pollutant emissions in enclosed and closed vent collection. The collected total HAP's are then either incinerated in a boiler or lime kiln or treated in a wastewater treatment system. HAP's captured from bleaching systems are controlled with a chlorine gas scrubber. Equipment inspection, performance tests, and leak detection and repair procedures are critical components of the standards. The required notifications are used to inform the Agency or delegated authority when a source becomes subject to the standard. The reviewing authority may then inspect the source to check if the pollution control system is properly installed and operated and that leaks are being detected and repaired and that the standard is being met. Performance test reports are needed as these are the Agency's record of a source's initial capability to comply with the emission standard, and serve as a record of the operating conditions under which compliance was achieved.

The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations. The information generated by the recordkeeping and reporting requirements described in this ICR is used by the Agency to ensure that facilities affected by the MACT continue to operate their control equipment and achieve continuous compliance with the regulation. Adequate monitoring, recordkeeping, and reporting is necessary to ensure compliance with these standards, as required by the Clean Air Act. The information collected from recordkeeping and reporting requirements is also used for targeting inspections, and is of sufficient quality to be used as evidence in court.

## **3. Nonduplication, Consultations, and Other Collection Criteria**

The recordkeeping and reporting requested is required under 40 CFR Part 63 Subpart S.

### **3(a) Nonduplication**

If the standard has not been delegated, the information is sent to the appropriate EPA Regional Office. Otherwise, the information is sent directly to the delegated State or Local Agency. If a State or Local Agency has adopted their own similar regulation to implement the Federal Regulation, a copy of the report submitted to the State or Local agency can be sent to the Administrator in lieu of the report required by the Federal Standard. Therefore, no duplication exists.

To minimize burden, much of the information the EPA would need to determine compliance would be recorded and retained on-site at the facility. Such information would be reviewed by enforcement personnel during an inspection and would not need to be routinely

reported to the EPA. In addition, in many cases the EPA has selected parameters for monitoring that are already monitored by facilities for other purposes.

Some of the facilities subject to this NESHAP will also be subject to requirements under the New Source Performance Standard (NSPS) for kraft pulp mills, 40 CFR 60 Subpart BB. The burden requested for this NESHAP does not duplicate any of the burden accounted for under NSPS Subpart BB.

Certain reports required by State or local agencies may duplicate information required by the standards. In such cases, a copy of the report submitted to the State or local agency may be sent to the Administrator in lieu of the report required by the standards.

### **3(b) Public Notice Required Prior to ICR Submission to OMB**

An announcement of a public comment period for the renewal of this ICR was published in the Federal Register on February 1, 2001, (66 FR 8591); no comments were received.

### **3(c) Consultations**

No consultations were conducted..

### **3(d) Effects of Less Frequent Collection**

Less frequent information collection would decrease the margin of assurance that facilities are continuing to meet the required standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the likelihood of detecting poor operation and maintenance of control equipment and noncompliance would decrease.

### **3(e) General Guidelines**

None of these reporting or recordkeeping requirements violate any of the regulations established by OMB in 5 CFR 1320.6.

### **3(f) Confidentiality**

The required information consists of emissions data and other information that have been determined not to be private. However, any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, Chapter 1, Part 2, Subpart B - Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

### **3(g) Sensitive Questions**

None of the reporting or recordkeeping requirements contain sensitive questions.

## **4. The Respondents and the Information Requested**

### **4(a) Respondents/SIC Codes**

Respondents are owners or operators of sources associated with the production of wood pulp, including but not limited to kraft, soda, sulfite, semi-chemical, mechanical, non-wood pulping, secondary fiber, or any combination of these types of pulping processes. Affected processes at the wood pulping sources include pulping, bleaching, and wastewater handling. The SIC code for the respondents affected by the standards is 2611 (pulp mills). The NAICS code is 3221 (pulp, paper and paperboard mills).

### **4(b) INFORMATION REQUESTED**

#### **(i) Data Items**

All data in this ICR that is recorded and/or reported is required by 40 CFR Part 63 Subpart S, Pulp and Paper Production Source Category, and referenced portions of Subpart A, General Provisions.

A source must make the following reports

<b>Reports for MACT SUBPART S</b>	
Construction/reconstruction	63.5
Construction or modification application	63.455(d)
Initial notifications	63.9(b)(2)
Anticipated startup	63.9 (b)

<b>Reports for MACT SUBPART S</b>	
Actual startup	63.9 (b)(4)(v)
Initial performance test results	63.10(d)(2)
Initial performance test	63.7(b), 63.9(e)
Rescheduled initial performance test	63.7(b)(2)
Demonstration of continuous monitoring system	63.9(g)
Compliance status	63.9(h)
Physical or operational change	63.5(b)(4)
Opacity or visible emissions	n/a
Periodic startup, shutdown, malfunction reports	63.10(d)(5)(I)
Source status report	63.10(e)(3)
Semi-annual Control Strategy Update (thru 2006)	63.455(b)

A source must maintain the following records

<b>Recordkeeping for MACT SUBPART S</b>	
Startups, shutdowns, malfunctions, periods where the continuous monitoring system is inoperative	63.10(b)(2)
Emission test results and other data needed to determine emissions	63.454 (a)
All reports and notifications	63.10(b)
Record of applicability	63.10(b)(3)
Records for sources with continuous monitoring systems	63.10(3)
Records are required to be retained for 5 of Years. Records must be kept onsite for the first 2 years, for the remaining 3 years records can be kept in a readily accessible off-site locate.	63.454
Site Specific Inspection Plans	63.454(b)

ii. Respondent Activities

<b>Respondent Activities</b>
Read instructions.
<p>Install, calibrate, certify, maintain, and operate Continuous Monitoring Systems (CMS) for each of the following affected units:</p> <p>1.1 Non-Sulfite Pulping Process choice of:</p> <ul style="list-style-type: none"> <li>a. provide documentation that vent streams are introduced to the flame zone of a boiler, lime kiln, or recovery furnace, or</li> <li>b. provide documentation that the control incinerator is operating at a minimum level of 1600 F and 0.75 second residence time, or</li> <li>c. Performance test of control device using Method 308.</li> </ul> <p>1.2. Sulfite Pulping Process - performance test of control device using test method 308</p> <p>2.1. Bleaching Process Vent Scrubber (MACT I Mills) choice of:</p> <ul style="list-style-type: none"> <li>a. provide documentation of scrubber operating parameters or previous performance test results, or</li> <li>b. performance test of scrubber or control device using test Method 26A.</li> </ul> <p>2.2 Bleaching Process Vent Scrubber (MACT III Mills) choice of:</p> <ul style="list-style-type: none"> <li>a. provide documentation of scrubber operating parameters, or previous performance test results, or</li> <li>b. performance test of scrubber or control device using test Method 26A.</li> </ul> <p>3.1 Non-Sulfite Pulping Wastewater Treatment</p> <ul style="list-style-type: none"> <li>a. performance test of condensate segregation and control device using test method 305 or</li> <li>b. performance test of biotreatment unit using test Method 304.</li> </ul> <p>3.2 Sulfite Pulping Process</p> <ul style="list-style-type: none"> <li>a. performance test of control device using test Method 305.</li> </ul>
Perform following initial performance test using appropriate Reference test Methods 26A, 304, 305, 308, and repeat performance tests if necessary.
Conduct initial and annual inspections of enclosures, closed vent and wastewater conveyance systems using test Method 21.
Write the notifications and reports for: Initial Notification; compliance status; initial compliance strategy report; compliance strategy report update; semi-annual summary report; continuous monitoring/ exceedance reports; notifications of - performance tests, construction/ reconstruction, anticipated startup, and actual startup.

<b>Respondent Activities</b>
Enter information required to be recorded for continuous monitoring for operating parameters, periodic inspections (monthly visual and annual Method 21) startups, shutdowns and malfunctions, personnel training and time for audits.
Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information.
Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information.
Develop, acquire, install, and utilize technology and systems for the purpose of disclosing and providing information.
Adjust the existing ways to comply with any previously applicable instructions and requirements.
Train personnel to be able to respond to a collection of information.
Transmit, or otherwise disclose the information.

While it possible that some State Agencies to whom this regulation has been delegated may have established electronic means of reporting for their permittees the staff contacted by EPA had only knew only of regular mail submissions. Modern pulp and paper facilities employ distributive controls on their manufacturing process and have integrated many of the compliance record keeping and reporting requirements into their systems.

## **5. The Information Collected -- Agency Activities, Collection Methodology, and Information Management**

### **5(a) Agency Activities**

EPA conducts the following activities in connection with the acquisition, analysis, storage, and distribution of the required information.

<b>Agency Activities</b>
Observe initial performance tests and repeat performance tests if necessary.
Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.
Audit facility records.



Agency Activities
Input, analyze, and maintain data in the Aerometric Information Retrieval System (AIRS) database.

### **5(b) Collection Methodology and Management**

Following notification of startup, the reviewing authority might inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source's initial capability to comply with the emission standard, and note the operating conditions, such as, control device fire box temperature, gas and liquid flow rates, production volume, wood species, under which compliance was achieved. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

Information contained in the reports is entered into AIRS which is operated and maintained by EPA's Office of Air Quality Planning and Standards. AIRS is EPA's database for the collection, maintenance, and retrieval of compliance and annual emission inventory data for over 100,000 industrial and government-owned facilities. EPA uses AIRS for tracking air pollution compliance and enforcement by Local and State regulatory agencies, and EPA Regional Offices and Headquarters. EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

The records required by this regulation must be retained by the owner or operator for five years. Records must be kept on-site for the first 2 years. For the remaining 3 years, the records must be stored on-site or at a location where they can be readily accessed.

### **5(c) Small Entity Flexibility**

Approximately 20 percent of the industry are considered small business entities, defined as being independently owned and operated and not dominate in their field of operations. Even though the recordkeeping requirements are the same for small and large businesses, the Agency considers these requirements the minimum needed to ensure compliance and, therefore, cannot reduce them further for small businesses.

The recordkeeping and reporting requirements were selected within the context of this specific subpart and the specific process equipment and pollutant(s). The impact on small businesses was accounted for in the regulation development. The requirements reflect the burden on small businesses. Even though, the recordkeeping and reporting requirements are the same for small and larger businesses. To the extent that larger businesses can use economies of scale to reduce their burden, the overall burden will be reduced. The Agency considers these requirements the minimum needed to ensure compliance and, therefore, cannot reduce them further for small businesses.

#### **5(d) Collection Schedule**

The specific frequency for each information collection activity within this request is shown in Table 2: Industry Burden.

### **6. Estimating the Burden and Cost of the Collection**

Table 2 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for each of the Subparts included in this ICR. The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. To minimize burden, much of the information the EPA would need to determine compliance would be recorded and retained on site at the facility. Such information would be reviewed by enforcement personnel during an inspection and would not need to be routinely reported to the EPA. In addition, in many cases the EPA has selected parameters for monitoring that are already monitored by the industry for other purposes. Responses to this information collection are mandatory.

The Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

#### **6(a) Estimating Respondent Burden**

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated at 50,232 (from Table 2) total person-hours. These hours are based on Agency studies and background documents from the development of the standards or test methods, Agency knowledge and experience with the MACT program, the previously approved ICR, and any comments received.

#### **6(b) Estimating Respondent Costs**

##### **(i) Estimating Labor Costs**

This ICR uses the following labor rates: \$78.54 per hour for Executive, Administrative, and Managerial, \$55.34 per hour for Technical, and \$35.64 per hour for Clerical. These rate(s) are from the United States Department of Commerce Bureau of Labor Statistics, March 2000, "Table 10. Private industry, by occupational and industry group." The rates are from column 1, "Total compensation." The wage rate(s) have been increase by 110% to account for the benefit packages available to those employed by private industry.

Managerial	\$78.54	(\$37.40 + 110%)
Technical	\$55.34	(\$26.35 + 110%)

Clerical \$35.64 (\$16.97 + 110%)

## **(ii) Estimating Capital and Operations and Maintenance Costs**

Since no continuous emission monitors are used to comply with this rule, the only type of industry costs associated with the information collection activity in the standards are labor costs and emission testing costs described below.

## **(iii) Capital/Start-up vs. Operating and Maintenance (O&M) Costs**

Since this rule does not require any continuous emission monitoring or electronic data submittal, total capital costs are expected to be insignificant. Continuous monitoring requirements are for parametric monitoring and these systems are already in place; therefore, no new equipment would be required by the recordkeeping and reporting requirements. Start up costs are expected to be attributed to emissions testing activities. It is assumed that all mills will contract a testing company to provide sampling and analytical services for air and water tests. Based on EPA's experience the testing methods required for this rule, the purchase of service for each method is estimated as follows:

- Method 308 - \$12,000;
- Method 26A - \$8,500;
- Method 304 - \$9,500;
- Method 305 - \$14,000; and
- Method 21 - \$2,500.

These estimates include labor, materials, and analytical costs. The number of mills assumed to contract testing companies for compliance is presented in Table 2. For the entire industry, the number of tests required annually for demonstrating compliance and the associated cost are estimated as follows:

- Method 308 - 2 Tests x \$12,000 = \$24,000
- Method 26A - 0 Tests x \$8,500 = 0
- Method 304 - 2 Tests x \$9,500 = 19,000
- Method 305 - 5 Tests x \$14,000 = 70,000
- Method 21- 103 Tests x \$2,500 = 257,500
- TOTAL \$370,500

Based on these estimates for testing costs and the number of mills assumed to perform compliance tests, the total annual cost to the industry is \$370,500. The total cost for this 3 year ICR is \$1,482,000. ( $\$370,000 \times 3 = \$1,482,000$ )

## **6(c) Estimating Agency Burden and Cost**

The only Federal costs are user costs associated with analysis of the reported information.

Publication and distribution of the information are part of the AIRS program. Examination of records to be maintained by the respondents will occur as part of the periodic inspection of sources, which is part of EPA's overall compliance and enforcement program.

The average annual Federal Government cost during the 3 years of the ICR is estimated to be \$189,483 (from Table 1). This cost is based on an hourly labor rate of \$68.19 for managerial staff, \$36.86 for technical staff, and \$27.36 for administrative/clerical staff. These rates are from OPM's 2001 General Schedule (GS) base annual salary data, excluding locality pay, basic rates, and travel associated with compliance activities. To derive hourly estimates, we divided annual compensation estimates by 2,080 which is the average number of hours worked during the Federal calendar year. We then multiplied hourly rates by the standard government benefits multiplication factor of 1.6 to account for overhead expenses. Details upon which this estimate is based appear in Table 1: Agency Burden.

#### 6(d) Estimating the Respondent Universe and Total Burden and Costs

Respondent Universe					
Regulation Title	(A) # new sources per year	(B) # of initial reports for new sources	(C) # existing sources	(D) # of reports for existing sources	(E) total annual responses
National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry	0	0	162	162 semi-annual reports x 2 = 324 24 exceedance reports x 2 = 48 Other once annual reports = 128 (notifications for: performance test, construction/reconstruction, anticipated startup, actual startup)	324+48+128 = 500

The number of total respondents is 162. This number is the sum of Column A and Column C of the *Respondent Universe* table. It is shown on the OMB 83-I form in block 13 a. This is the number of existing sources plus the number of new sources anticipated in one year.

The total annual responses is 500. This number is in column E of the *Respondent Universe* table. It is shown on the OMB 83-I form in block 13 b. The total annual labor hours are 50,232. This

number is shown on the OMB 83-I form in block 13 c. Details upon which this estimate is based appear in Table 2: Industry Burden.

The total annual capital and O&M costs to the regulated entity are \$370,000. This number is shown on the OMB 83-I form in block 14 c. These costs are detailed in section 6 b (iii) *Capital/Start-up vs. Operating and Maintenance (O&M) Costs*.

#### **6(e) Bottom Line Burden Hours And Cost Tables**

For details on industry and agency burden see attached tables, *Table 1 Annual Agency Burden and Cost of Record Keeping and Reporting requirements of the NESHAP for the Pulp and Paper Production Source Category – Process Operations* and *Table 2 Annual Respondent Burden and Cost of record Keeping and Reporting Requirements of the NESHAP for the Pulp and Paper Production Source Category – Process Operations*

#### **6(f) Reasons for Change in Burden**

The decrease in burden from the most recently approved ICR is due to an adjustment.

- (1) The sharp reduction in burden for respondent facilities is due to the fact that nearly all sources have completed the required one-time activities, such as initial performance tests, during the first 3 years of the ICR cycle, which corresponds to the compliance date of this MACT standard.
- (2) Adjustments have also been made to simplify the annual cost calculations, which are now calculated with simple averages instead of the amortization schedules used previously.
- (3) Adjustments to the labor rates used to estimate burden for this ICR also impacted the total costs.
- (4) Having made their initial notification, 331 facilities, the non-bleaching MACT III mills, that were accounted for in the original ICR, have been eliminated from the respondent total since they have no further obligation under the MACT.

#### **6(g) Burden Statement**

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable

instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency, Mail code 2822, 1200 Pennsylvania Avenue, Washington, D.C. 20460-0001; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Include the EPA ICR number 1657.04 and OMB Control Number 2060-0387 in any correspondence.

#### **Part B of the Supporting Statement**

This part is not applicable because no statistical methods were used in collecting this information.